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From *Family Based* to *Industrial Based* Production: Local Economic Development Initiatives and the HELIX Model

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ABSTRACT

To build a strong local economy, good practice tells us that each community should undertake a collaborative, strategically planned process to understand and then act upon its own strengths, weaknesses, opportunities and threats. From this perspective we start with the local communities but how is this related to the perspective from the Helix model in which three actors are explicitly introduced: the Government, the Industry and the Universities? The purpose of local economic development (LED) is to build up the economic capacity of a local area to improve its economic future and the quality of life for all. To support the Local Economic Development in remote areas, a program has been developed based on the LED frame work of the world bank. This approach and the experiences over the past years with this program are described in the first part. In the second part of the paper, We analyse work done with that program with the help of the social capital concept and the triple helix model. In all cases it is important to pay attention to who is taken the initiative after the first move (and it is not always the governance as actor) and for the triple helix we suggest that the concepts of (national) Government, Industry and University need a translation to Local Governance Agency, Cooperation or other ways of cooperation of local communities and Local Universities. Although a push from outside might help a local region in development the endogenous factors are also needed.

Keywords: *Triple Helix model, Local Economic Development, Local Actors, Double Triangle within the Helix Model*

1. Introduction

1.1. Local Economic Development, the focus on the local actors and the Helix model.

Many regions in the world are not yet developed in such a way that all the inhabitants of that region can live a life that at least meets some minimum standards of staying alive.

Many attempts have been initiated and many theories have also been developed on how to set up economic activities. However, most of them were not working properly or were much too focused on the economic development at the macro level. In this situation, the worldbank initiated a focus on local economic development programs, the purpose being to build up the economic capacity of a local area to improve its economic future and the quality

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of life for all. Thus, LED programs are all programs that are designed to improve the economic future of a specific region. Partners from different sectors in a specific region work together collectively to achieve goals, although, as we shall see in the daily practice, the first initiatives for LED programs usually came from the national government and, in a second phase, were worked out by local actors. In terms of the Helix model, this means that, for this kind of work, the Government as an actor should be seen as an actor acting on the national level and acting on the local level: the local governmental agencies. Also for the Industry as an actor in the Helix model, we will show in this paper that this actor can be more specified.

In all of these programs, however, the focus was on the local actors but not on how these actor activities could be studied with concepts from the more sociological perspective. Concepts like “social capital” and “social entrepreneurship” were not in the center of these programs and also not used in the beginning as a theoretical perspective that might shed new light on what local economic development processes look like and how they can be influenced. From the perspective of the Helix model, we pay attention to the questions of which actors (or actor) take the initiative and what kind of activities they are beginning with.

This will also result in a more specified model of the Helix idea. In this paper, we will use our own observations of field visits and our evaluation reports to begin conducting research with these concepts in relation with our work on supporting local economic development in several projects in Indonesia.

In cooperation with the Indonesian Government (The ministry of planning; the Bappenas), we (The ITB and Rug) were invited to develop with them programs in a practical way for remote areas in such a way that local economic development could be initiated and worked out in (small scale) business activities. An extra condition was that all or at least a large part of that local community was

involved, and the quality of life of all people in these areas would improve.

We made use of the work of Worldbank and of Swinburn to rely on a good definition of LED. According to Swinburn (2006), “The purpose of LED is to build up the economic capacity of a local area to improve its economic future and the quality of life for all. It is a process by which public, business and non-governmental sector partners work collectively to create better conditions for economic growth and employment generation.” This definition is also used by the Worldbank on their website to define LED. Canzanelli (2001: 9) stresses that LED as a process in which local actors shape and share the future of their territory will stimulate and facilitate partnership between local stakeholders.

1.2. Our approach to support LED: REDS Programs

Our REDS program focuses on resource development and empowerment of the local community. The basic underlying idea behind this program is that the growth of a region is dependent on its ability to enter and to take part of the competition in the market. Many regions in Indonesia possess products with a certain economic potential for national and international markets. Most of the time, these products and the way these products are produced are family based and dependent on the season, harvest conditions and availability of human power to produce. In our program, we strive to support activities that will present the possibility to change these family based production ways to a more industrialized way of producing these goods.

In order to accomplish this, many improvements and the right decisions need be made in order to improve. Improved quality, correct technical knowledge and the use of proper procedures to develop these products could provide an export potential for these products, leading to extra money flowing into the region. Creating sustainable growth in the target regions by providing the government and

policy makers with the knowledge and skills for developing more efficient and effective policies and strategies can be seen as the overall goal of the REDS program.

In order to provide the government and policy makers with the right skills and knowledge needed for the development of strategies and policies, an education program has been developed at the University of Groningen (UoG) in The Netherlands, the Neso in Jakarta, and the Bandung Institute of Technology (ITB) based on practical and successful experiences in Indonesia for approximately seven years.

In general, the education program concerns three teams from three different areas from all over the country. A multi disciplinary team consists of one representative from the local university, at least one representative from the entrepreneurial sector and a group of local officers from the province/ city/ area.

The REDS teams are responsible for 'one region and one product'. A target region in Indonesia and a product with a certain potential for national and international markets, produced in that region, are chosen. The implementation of the project in the region and the distribution of knowledge, the creation of networks, the involvement of people and the development of the products with economic potential are the responsibility of the REDS teams.

The national planning authority was basically responsible for the selection of the different participants on the basis of diverse selection criteria. Following the selection, a region was chosen which produced promising products, one of which needed to be selected. After choosing one region and one product, the REDS teams needed to be composed. The teams prepared a research proposal concerning the selected promising products, focusing on the potential for external demand and continued future growth, as well as the potential to raise incomes, create productive employment opportunities for the poorer

households, and the possibility to increase initial earnings from export.

With the main goal in mind of creating sustainable growth within the target regions, training on the concept of local economic development is given as input to the REDS teams in Indonesia and in Groningen in the Netherlands. The training program plays an important role in the REDS program and is designed in the direction of offering experience through management exposure in the Netherlands which the teams can then apply to their own situation in order to deliver a contribution to the development of the economy. The training period will supply the REDS teams with essential information, knowledge, and skills for the implementation of action plans in the target regions. The REDS team must function as a driving force that will contribute to the development in the region as indicated in figure 1.



Figure 1: REDS team as the starting engine of the project

The training period begins with a training of five weeks with the first half of that period being spent in the country of origin but outside the living context of the teams that have been chosen. The second half of the time is spent in the Netherlands at the UoG. After receiving information concerning the background of REDS and theories and practices of ways of planning, the teams can be engaged in the preparation of the first action plan. Following this training period, the REDS teams travel to the Netherlands. In Groningen, lectures are

presented at the Faculty of Management and Organization concerning diverse aspects like action planning, Quality Management, the SWOT analysis, the relationship between government and entrepreneurship, innovation and knowledge transfer.

Along with the lectures, field trips are made with the REDS group. In the Netherlands, the focus of the training is mainly on the development of a realizable action plan for each region to overcome the most institutional barriers for Local Economic Development. In the training of the concept of LED, the most essential parts and the analytical tools to analyze the institutional environment for LED are discussed. The training emphasizes the institutional setting, functions and skills for the attraction of direct investment, the development of products and technology, marketing and export and the development of small enterprises. Following the training period in the Netherlands, another period of training on the local universities in Indonesia is organized. In this period, further development of the action plans take place. The focus here is placed on customization of the regions for which the action plans are developed.

The action plans deal with different stakeholders which play an important role in obtaining the formulated objectives by the REDS teams. Stakeholders are needed to strengthen the people, the products and the industry as well as for the creation of networks. The group of stakeholders exists of research groups, farmers, quality control companies, entrepreneurs, technical support organization, universities, credit organizations, foreign investors, traders, exporters, the local and national government, and market research organizations. Access to the correct information with the proper level of detail and at the correct time is the key to effective stakeholder involvement. In the REDS program, the REDS teams are responsible for the participation of the right stakeholders at the right moment. In the regional seminar, scheduled 3 months from the beginning of the project and the national seminar, which takes

place after one year, all stakeholders are invited to listen to the action plans of the REDS teams and have the possibility to interact with the team members and give them comments and ask questions. The seminars, organized in the country of origin, are important in order to update the stakeholders concerning the progress of the projects with the goal to draw new stakeholders and to spread the action plans among the different stakeholders and local inhabitants. Concurrently, the presentation of the action plans builds trust in the stakeholders due to the demonstration of the REDS teams' abilities to proceed independently in the program.

2. Theoretical perspectives on supporting Local Economic Development

Focus on the relations between the people involved: social capital

In our program, we spend a significant amount of time on the people who are involved. We begin with the three multi-disciplinary teams, but we also attempt to reach the stakeholders through the team members. We believe that, based on practical experiences, one of the crucial factors will be in which way and who is involved in starting up business wise production of activities. In the theories on development of human societies, we will make use of the concept of Social Capital. Social capital (thanks to Bob Jan Schoot Uiterkamp for this part on formulating this part of social capital, based on his master thesis (August, 2011) is commonly defined as (Woolcock (1998): "*The information, trust, and norms of reciprocity inherent in one's social networks*".

Coleman (1990) clarifies the distinction between human- and social capital. According to Coleman (1990), human capital consists of individual resources such as knowledge and skills while social capital exists in the relationship between social actors. Accordingly, social capital forms the basis for the accumulation of human capital (Westlund and Bolton, 2003) Thus, social capital is an

attribute that is created in interactions among people, which increases the strength and value of personal qualities such as intelligence and work experience and is manifested in norms and networks that enable people to act collectively (Coleman, 1988). Socially excluded-, marginalized-, or systematically discriminated individuals, households or groups that partake in social networks can rely on the support of networks. Networks can bring benefits in terms of the provision of informal credit. In the areas in which REDS programs have been carried out, it will be interesting to see from this perspective how the social capital factor is developing. Creating a REDS team is already the beginning of networking, and the attempts to include more local stakeholders is also developing the networks in remote areas.

When looking at the time frame in which new programs will be initiated, it is relevant to investigate the social capital factor or, in business terminology: the institutional level of a region and, afterwards, in a time perspective, how the development will be on that level and how that might contribute to better economic development of that specific region.

Focus on who is taking the initiative: The Helix partners and social entrepreneurship

Birkholzer (2005) has already raised the question regarding who is taking the initiative by describing four scenario's: "The first scenario is called "development from above": The main actor here is the state, working top-down from the central government to regional government and local authorities. In this scenario, the local actors, people, and enterprises, as well as authorities, wait for decisions and resources coming from above sources because they believe that the state is either mainly responsible for all kinds of development or are the only source that has the power to do so.

The second scenario is called "development from outside": Outside investors are needed to bring in the necessary resources, especially

money. It often follows the breakdown of the first option. What they have in common is that the local actors believe they cannot accomplish anything on their own.

The third scenario could be called "wait and see": The local actors remain more or less passive, waiting for things to come. Some might look at it as a quasi natural process of selection, and some may have resigned as a result of the failures of options one and two. The traditional "solution" in this scenario is migration. In fact, this is the most popular option, although it becomes more and more difficult to find places to go, not only because of political restrictions, but also for economic reasons. The islands of prosperity around the world become smaller in size and numbers.

The final scenario is called "development from within": As option number one is dominated by the national government, number two by private investment and number three by fatalism, in this last scenario the local actors, the people themselves, play the key role. This is the heart of Local Economic Development: It begins when people realize that neither the state nor the market economy serve their needs or solve their problems and when they are unwillingly or unable to leave their homes. In terms of the Helix model, this is a change in actors from the national government to the local governmental agents and a change from bigger companies working also at the national level to smaller companies who focus on the local situations. And the last partner, the universities, will be the local universities in the region.

Within this last scenario, however, new questions must be raised. In practical situations, there will be questions such as who is going to take the initiative and or who is going to work out the initiative. In the answer, we have to consider that it will not only be individuals or one actor that will and can do this. In most cases, it will be combination of actors. Actors can be individuals, but much more often will be organizations like a cooperation, a department of a local

governmental or non-governmental organization.

From a theoretical point of view, we can think of this also as a question of social entrepreneurship. “Social” refers, in this case, not just to the output of the activities or results that might be in benefit of the local community but also refers to the actors who work together as a group and develop group entrepreneurial activities. Within this perspective, we must broaden our questions and not just limit ourselves to who is taking the initiative but also in which way and with what kind of activities the initiative is developed and worked out.

Social entrepreneurs¹ are assumed to include both public and private sector stakeholders as well as policy makers. Furthermore, social entrepreneurs can be seen not just as charismatic leaders and social revolutionaries but also as cornerstone movements, departments of governmental organizations, local corporations, labor unions, etc. or combinations of these local actors. In general, social entrepreneurs are the upsetting agents of the social sector: mission-driven opportunity seekers who are always searching for innovative solutions to social problems but, in the context of Local Economic Development, the focus is not just on the social problem of the incomes that are too low but also in setting up business activities. The social entrepreneur and the conventional entrepreneurs have much in common in this way. They both wish to set up economic activities to earn money, and they both want to create a business that is attractive to do (assuming that entrepreneurship is more than just trying to make as much money as possible). The first key difference, however, lies in the outline of the entrepreneurial objective with the social entrepreneur focusing on financial outputs *and on* social outcomes with equal value instead of the financial

outputs as the most important one for the entrepreneur. The second key difference in this context is that the entrepreneurial activities are done or started by a combination of local actors and not just by one so called “entrepreneur”.

The scene of social entrepreneurship can be formulated as a continuum with not-for-profit voluntary activism on the one end and corporate social innovation at the other (Kanter, 1999: see Figure 2). On the left side it starts with a range of not-for-profit organizations that are socially driven: these range from fully funding to those that are partially self-sufficient having developed some internal sources of income. Next are social enterprises that are fully self-sufficient or moving towards self-sufficiency either through exploiting profit opportunities in their core business or through developing distinct activities through which the social mission may be funded. Finally, there are corporate divisions or discrete projects within conventional companies that aim at a social objective.

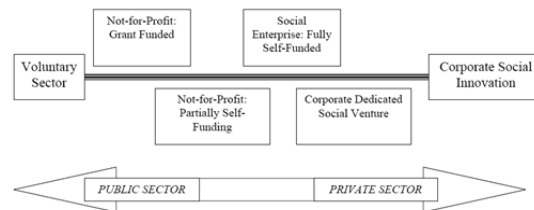


Figure 2. Funding dimensions of social entrepreneurship, Kanter, 1999

In our projects, these means we must pay attention to the possible combinations of actors who are taking the role of entrepreneur, how they (the social entrepreneurs) are related and in which way the local society is interrelated.

¹This section is based on the bachelor thesis of Bart JoostWerink (2010) *Social entrepreneurship and local economic development*

3. Who is taking the initiative in the local situation: empirical observations.²

BauBau (2007)

In BauBau the Reds team consists of five people. Seaweed was chosen as the main product to focus on. In this project, it became clear that the head of one of the departments of the local governmental agency took the initiative and worked out the work plans developed during the program. He was also the team leader but was able to further develop his role. He was highly supported by the team member of the local university, and the other team members were willing to work in this way. All of them realized that this was in favour of the things they wanted to realize as formulated in the business and action plans they developed.

Belitung (2008)

The Reds team from Belitung consisted of five people. The product they chose to stimulate the local economic development of their region was Fish Abon, a product that is made of fish by dry cooking the fish and adding all sorts of herbs so that the final fish abon can be used as added flavour to meals.

In this project, the civil servants of the local government took the initiative and attempted to involve the women of the fisherman. This project was on a very small scale. We visited a group of five women who worked together to stimulate the increase of production and improve the way the fish abon was produced. The women shared their knowledge and means and produced their product together. They formed a cooperation (or corporation) together, and this was supported by the civil servants of the local government.

Pekalongan (2008)

The Reds team from Pekalongan consisted of 7 people. The product they chose to stimulate their region's development was batik. On the

one hand, in this region, there are some large families/companies and a lot of small families who all produce batik. The large companies produce the batiks by printing the textile with machines and the small families are making use of the handmade process of colouring the textile. In this group, there was a remarkable young entrepreneur, a real businessman who truly wanted to improve the production process. Together with civil servants, he attempted to improve the way the batik was coloured because this process is very environmentally unfriendly. In this combination, they were also able to organize support from the major (the bupati) of Pekalongan. Along with this support, they also attempted to organize the small families in clusters so that they could learn from each other and support each other.

Pinrang (2008)

The Reds team from Pinrang consisted of 7 people. The product they chose to stimulate their region's development was shrimp. Following their return to Pinrang and during the local seminar, it became very clear that one of the shrimp farmers was the sole driver for development. He was a moderately wealthy fisherman and, during his stay in Groningen, he seemed to be less interested. Afterwards, the opposite became obvious (language was his biggest problem). It was also helpful that this fisherman, although he could have easily been the motor for economic development on his own, he also involved the civil servants of the local government to assist him and to help convince the other fisherman to also focus on what we labeled as "green shrimp".

Kendari (2009)

The Reds team consisted of 6 people, and they chose to stimulate the local economy by focusing on the fish abon. In Kendari, it was extremely difficult to determine who took the initiative and if there was any progress in their situation. It seems that the problems of producing fish abon in a more industrialized way are enormous (production, marketing, product diversification, etc.).

²*based on the evaluation reports made for each of the programs and own observations during field visits to the teams*

Singakawan (2009)

The Reds team consisted of 8 people, and they chose to stimulate their region by focusing on the production of corn. We noticed that the civil servants of the Bappeda (the local governmental planning department) were able to stimulate new activities. However, we also noticed two more actors. First, an older, impressive lady inspired the local farmers in improving their corn production and teaching them to diversify the crops. A second source of stimulation were the people from the local university (one was also a member of the team) who were helping individual farmers in improving the quality of the sweet corn (and it tasted amazingly good).

Tanah Datar (2009)

This team consisted of 8 people, and the product they chose was beef cattle. Due to the volcanic eruption in Iceland, we were not able to visit this group, therefore, we do not have field observations for our research.

Poso (2010)

The Reds team from Poso consisted of six people. The product they chose to stimulate the development of their region was cacao. In this group, we saw the driving force coming from one of the civil servants of the Bappeda. He had already been working in this area for a long time in this department, and almost all of the farmers knew and trusted him. With the help of the other team members, he was able to find a local NGO to help him convince the farmers about the plans of the team (and the local NGO was able to raise money from the Worldbank for this). In a second step, this team and the farmers were able to arrange an agreeable deal with a large company for selling their cacao nuts for a fair, transparent and fixed price and a clear indication system for the farmers on the quality of the beans they brought to the company. In this way, the problem of the wholesalers with their nontransparent price system was solved. This team was also able to do their work in a proper way with the support of the team member coming from the local university. Though not dominant, the team member was always

present and always supportive for the group and for the outside world showing the importance of the work and the initiatives of this Reds team.

Banjarmasin (2010)

The Reds team from Banjar consisted of eight people. The product they chose to stimulate the development in their region was rubber. In Banjarmasin, the rubber farmers themselves were already organized in small cooperative groups. It looked like a type of impasse there because all the stakeholders knew about one of the main problems: the quality of the rubber that came from the farmers and was sold to the companies. In that relation, no one took the initiative to make possible improvement (A simple solution was available. The farmers would not add heavy material to the raw latex and then the company should pay a higher price for the raw latex). The cooperative groups had a strong internal bond but only a weak network existed over the groups, though developments toward a stronger network could be seen (more group meetings). There were also a number of richer farmers developing ways of adding value to the latex by drying and pressing the latex at the beginning of producing natural rubber.

Kupang (2010)

The Reds team from Kupang consisted of eight people. The product they chose to stimulate the development of their region was beef cattle. The team's initiative came through in their ability to organize the support from the local major (the Bupati) and the role of at least one of the team members. The farmer entrepreneur (a rich one) who was absorbing knowledge and experiences as much as he could during the program was working as an example for the other farmers to see how things could be done differently. The team was also able to organize the support from the Bupati due to one of the team members being his wife who was also successful in raising cattle (so a double role).

4. Conclusion

As Birkholzer (2005) is indicating in his fourth scenario, local economic development must come from within. The Helix model is stressing the Government, the Business and Universities as actors. We can see from our cases that the motor (and the Reds teams are the starting engines) from within might be different in each situation, but the public sector, and more specifically the local governmental agencies, still take part in that motor, only with newer roles compared to the earlier days.

In our projects, it was the national governmental agency, the Bappenas, who initiated in cooperation with agencies from the level of the province the first steps of Local Economic Development. But this could only be a start. The next steps have to be taken by local actors. And these local actors might reflect the same as in the Helix model: government, industry and university but at the local level!

At the local level, we have seen in our projects that, within this local Helix model, it was not always the same actor or combination of actors who took the initiative. Combinations of a head of a department with a local company or the Bupati himself, a head of department with a leader from the local cooperation, or a civil servant of a department with some farmers are all kinds of combinations we have seen. In terms of the Helix model, this means that the business as an actor at the local situation might be a local company but also a cooperation of fishermen or a group of women.

So we like to make more explicitly the role of the local actors as a double triangle in the triple helix model as can be seen in figure 3.

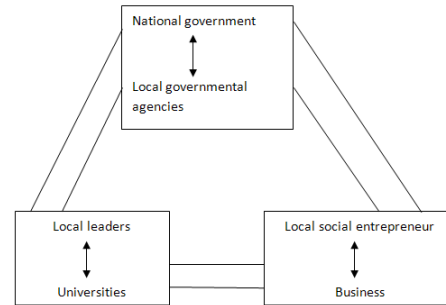


Figure 3. The double triangle in the triple helix model

As Helmsing in 2003 has already indicated, local economic development is about new roles for the public sector. This applies not only to central government but also to local governments. First, (local) government is to provide the right mix of local public goods and, secondly, must facilitate or *enable other actors, communities, private firms, workers* and NGOs to make their most productive contribution. In our cases, we have shown that indeed other actors beside the government are important.

The most important thing we want to add is that, in most of our cases, it is clear that it will be a combination of actors that will function as a motor for local economic development. In these combinations, the local government was involved as an active partner in almost all of the cases, *but it was also clear that it was never the local government alone that took the initiative or continued the initiative.* In terms of the Helix model, all of the three actors are important. At the local level, it is not just the actors from the national level but also actors who work on the local level who are of importance for the local economic development initiatives. The attention must also be directed to all kinds of possibilities of cooperation between these local actors. Last, but not least, the actor Industry as an actor, from the Helix model encompasses at the local level much more than only private companies.

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